



# Launch *PhD Science*<sup>®</sup> *Texas*

## Participant Handout



## Texas Essential Knowledge and Skills (TEKS)

Use this space to take notes on how *PhD Science Texas* is aligned with TEKS.

## Shifts in Science Instruction

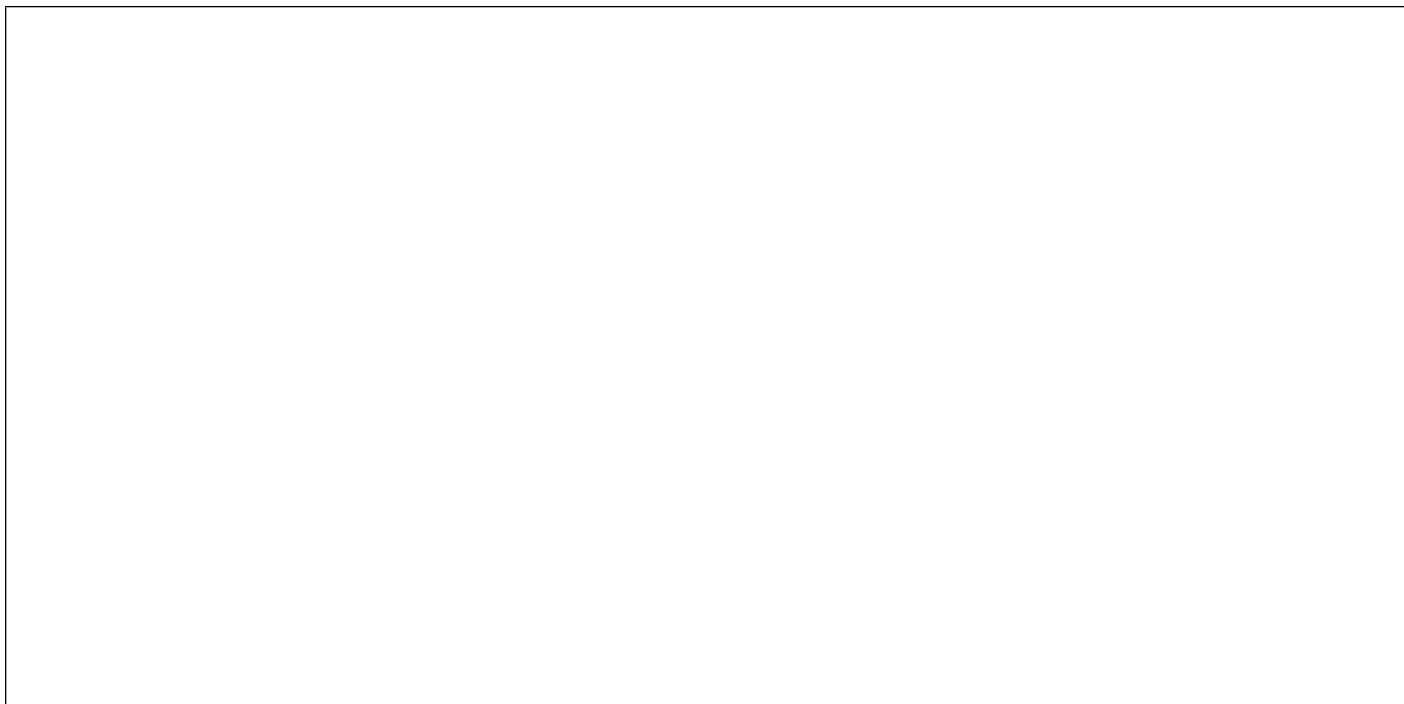
Use this space to take notes on the shifts.

Shift	Notes
Phenomena	
Practices	
Coherence	

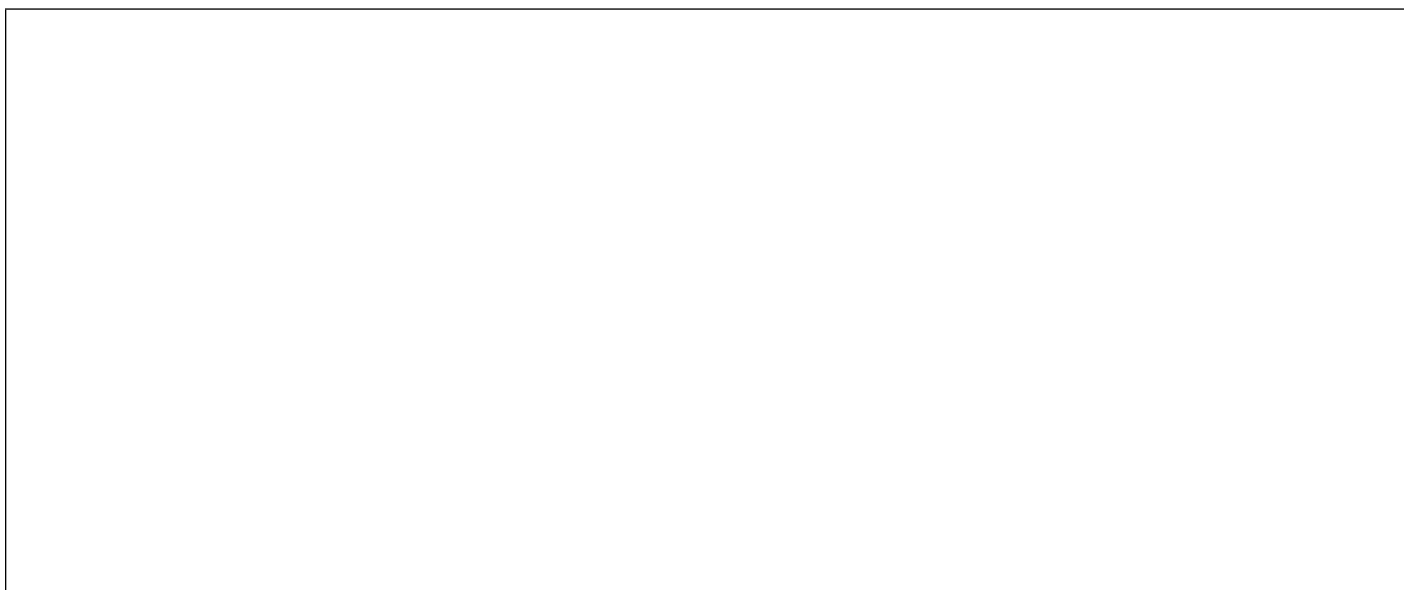
## Student Hat: Level 1 Module 3 Survival

**Observe: What do you see?**

**Draw.**



***Over and Under the Pond* (Messner and Neal 2015): Record a list of pond plants and animals as they are mentioned.**



**Draw a Model: What do you know?**

**1. Draw.**

**2. Label.**

A large, empty rectangular box with a thin black border, intended for a student to draw a model and label it. The box occupies most of the page below the instructions.

## Student Hat: Level 4 Module 2 Energy

**Notice and Wonder: Record what you notice and wonder about the two paintings.**

I notice	I wonder

**Windmill Model: Draw a model to represent your group’s windmill. Include how the windmill uses the wind to make something happen.**



**Provide an explanation.**

---

---

---

---

## Look Like, Sound Like, Feel Like Chart

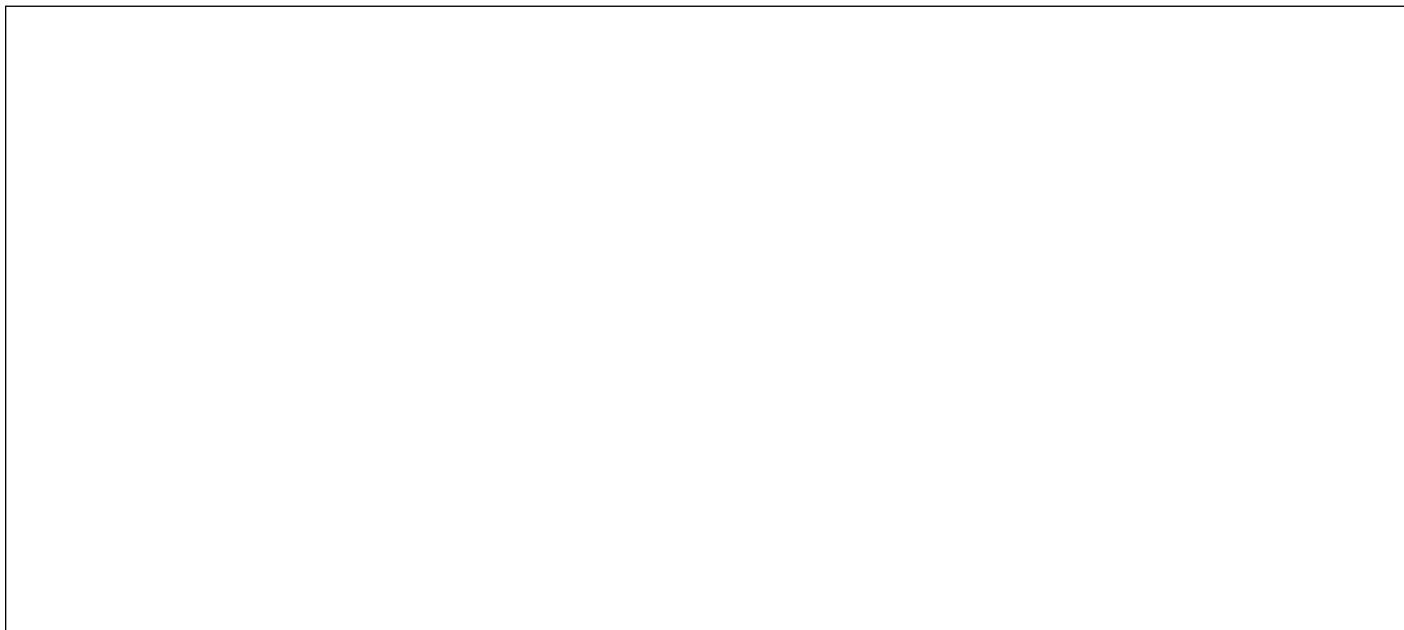
Throughout the session, use the chart to reflect on what your *PhD Science Texas* classroom will look like, sound like, and feel like when you implement the instructional shifts.

Look Like	Sound Like	Feel Like



## **Classroom Footage: Level 3 Module 2 Survival and Change**

**What do you notice about how the anchor model was developed?**



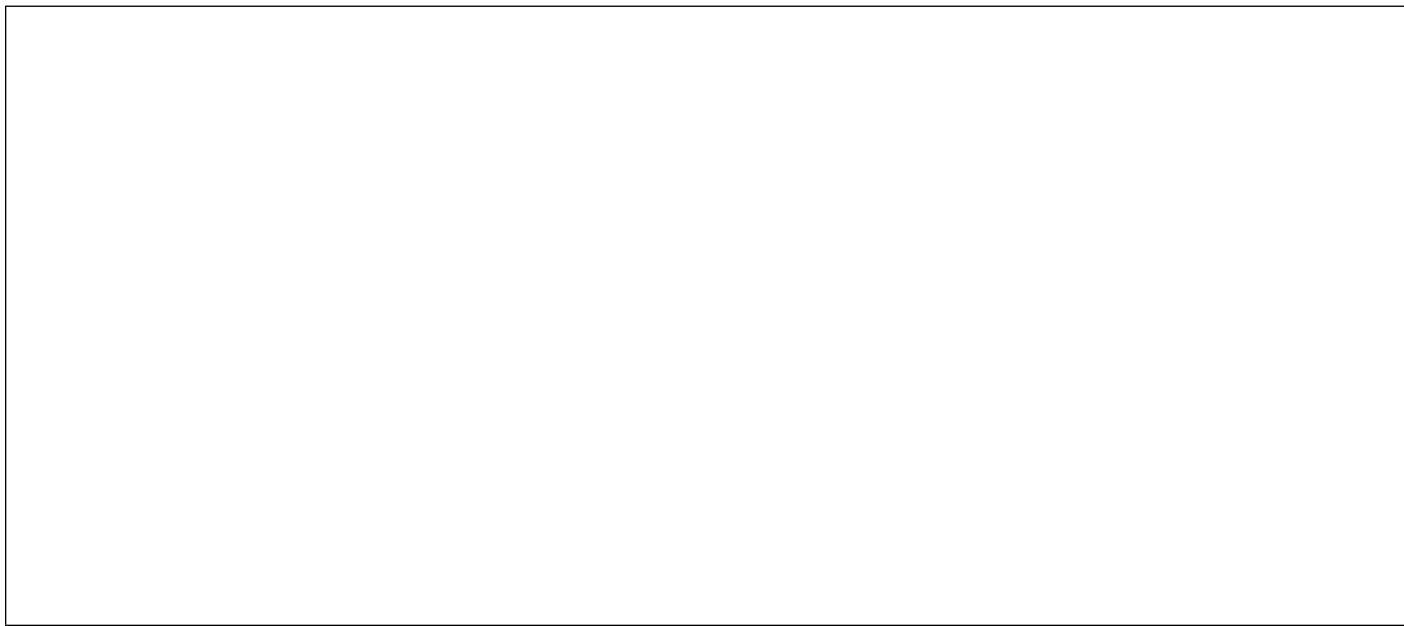
## Anchor Visuals

Use this space to take notes on anchor visuals.

Anchor Visual	Notes
Anchor Model	
Driving Question Board	
Anchor Chart	

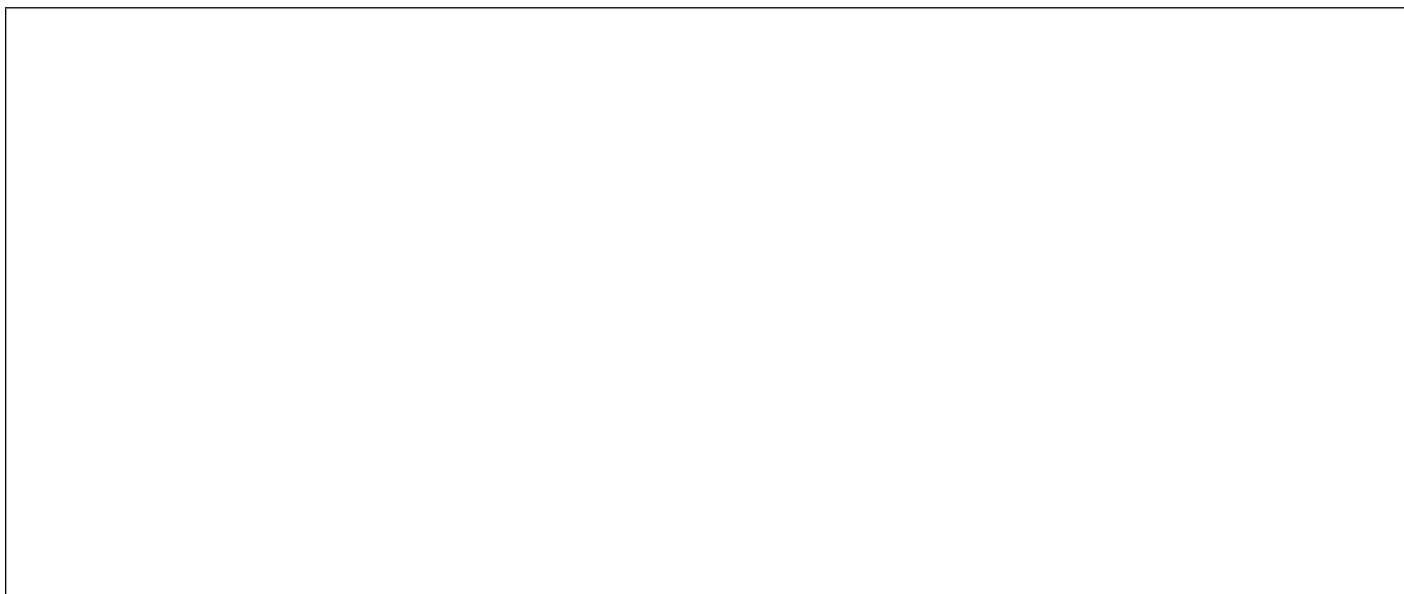
## Curriculum Structure

Use this space to take notes on *PhD Science Texas*'s curriculum structure.



## Module Overview

Use this space to take notes on the Module Overview.



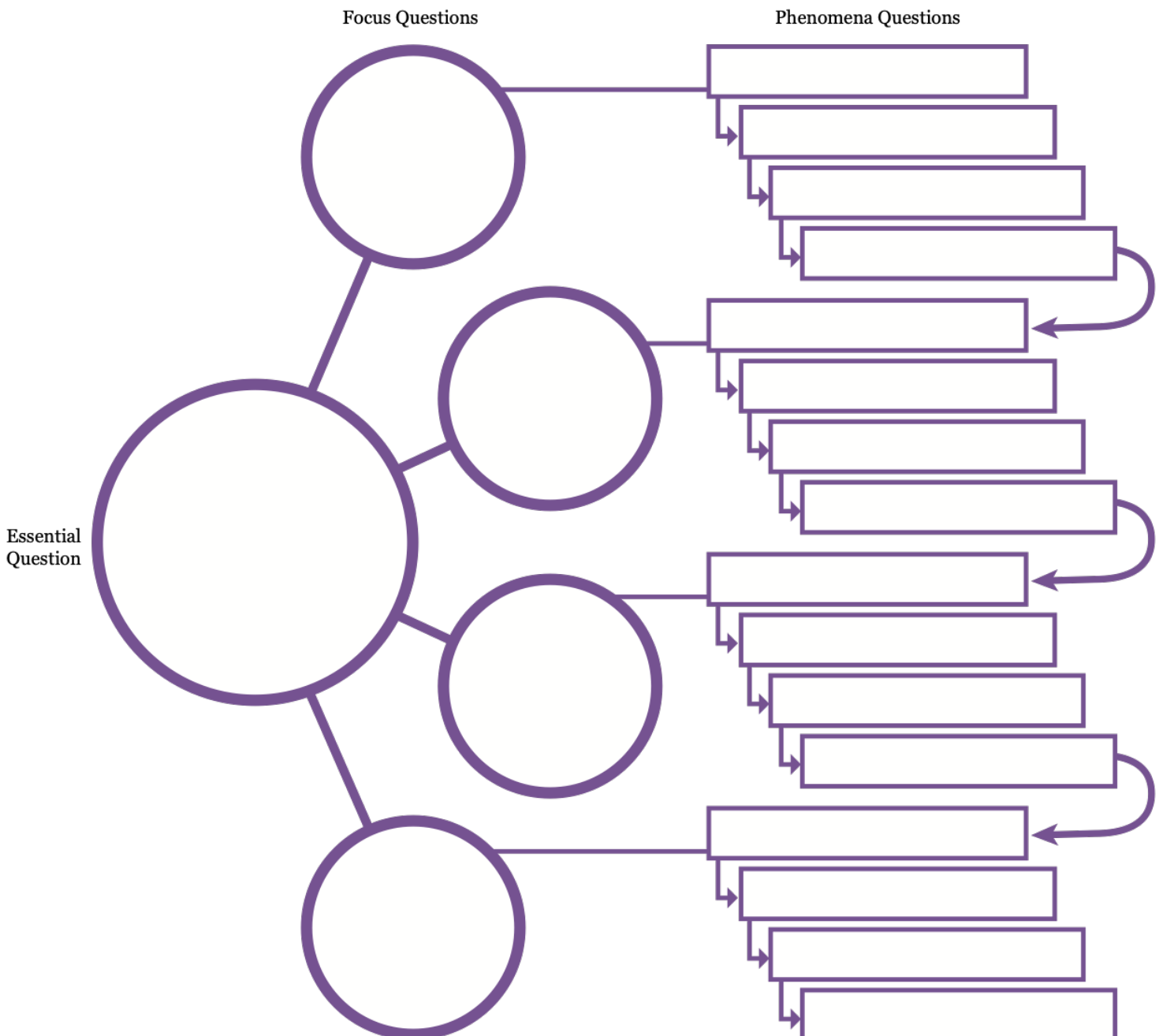
## Notice and Wonder: Module Overview

Record what you notice and wonder about the Module Overview. Focus on the Introduction, Module Map and Focus Standards.

Part of the Module Overview	I notice	I wonder
Introduction		
Module Map		
Focus Standards		

## Module Questioning Structure

Complete the Module Questioning Structure graphic using the questions from the Module Map.



## Notice and Wonder: Lesson Set

As you explore a lesson set, record what you notice and wonder.

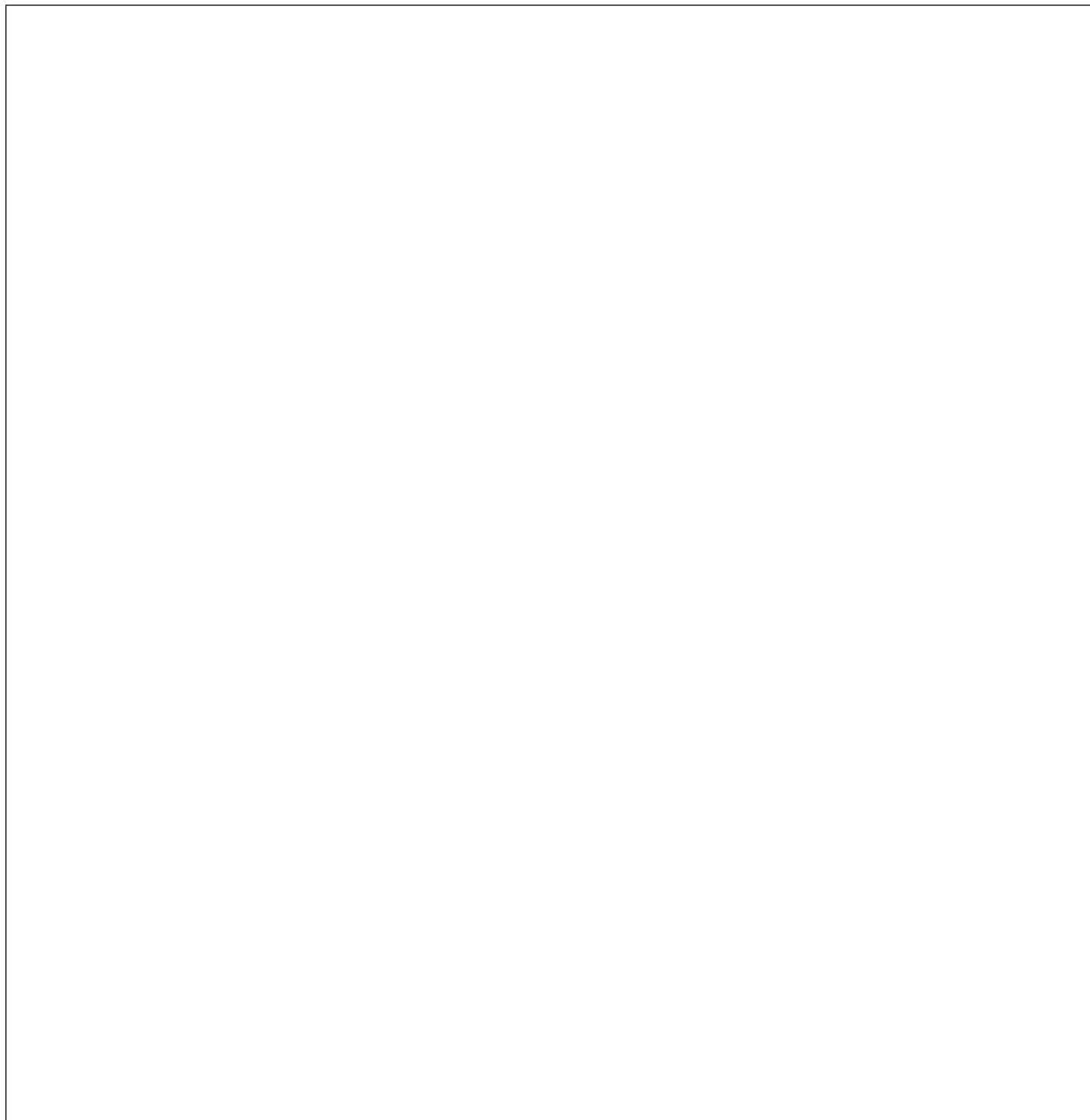
I notice	I wonder

## Lesson Set

Use this space to take notes on the lesson set structure.

## Lessons

**Use this space to take notes on the lesson structure: format, classroom discourse, hands-on investigations, Science Logbook, instructional supports and sidebar notes, and homework.**

A large, empty rectangular box with a thin black border, intended for students to take notes on lesson structure, format, classroom discourse, hands-on investigations, Science Logbook, instructional supports, sidebar notes, and homework.

## Assessments

Use this space to take notes on assessments.

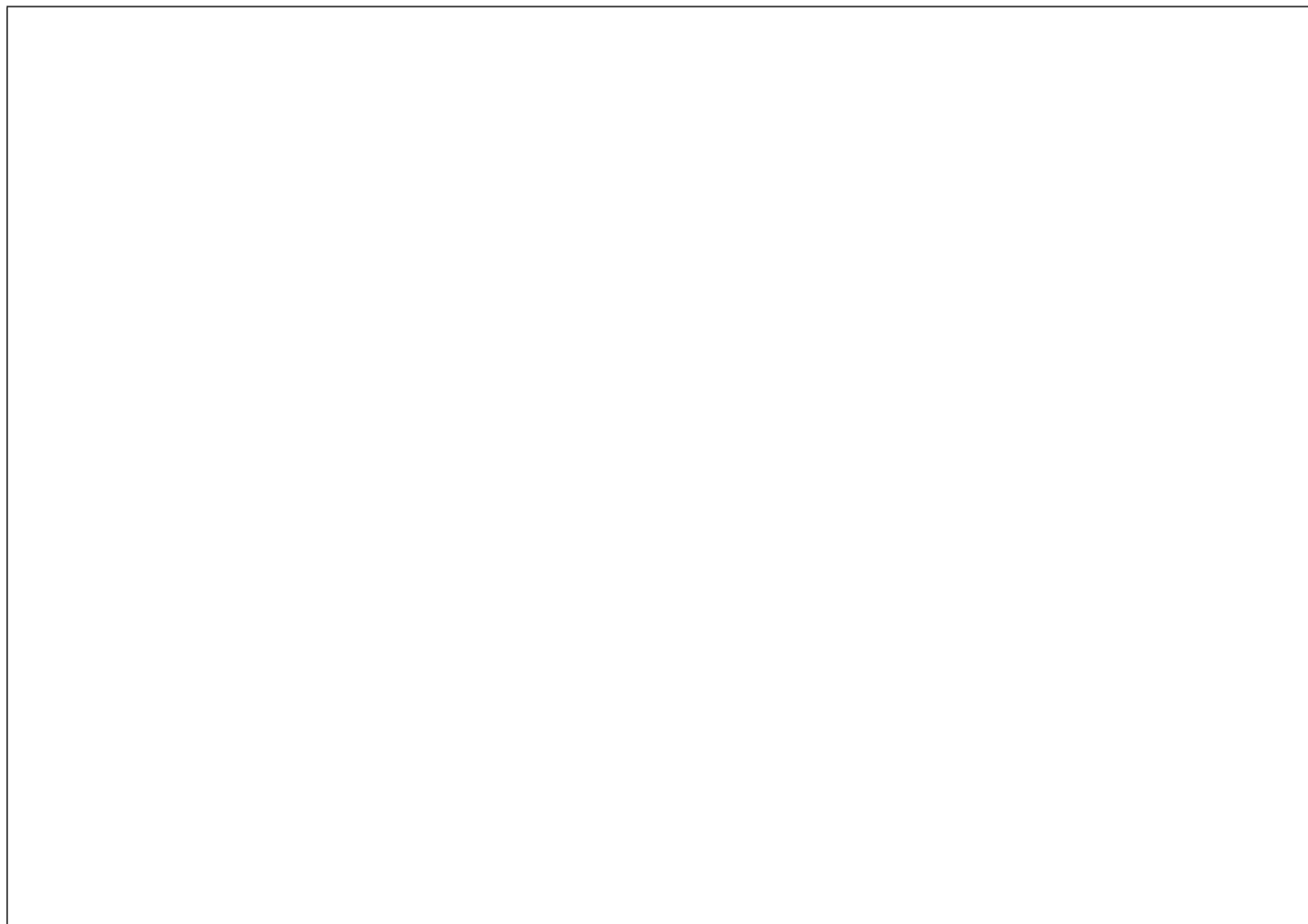
Assessment	Notes
Check for Understanding	
Conceptual Checkpoint	
Engineering or Science Challenge	
End-of-Module and End-of-Spotlight Assessments	
Benchmark Assessment (Levels 3–5)	



## Module Assessment Exploration

Explore the assessments in the Teacher Edition.

- What do you notice?
- How do the assessments build on each other?



## Additional *PhD Science Texas* Resources Notes

Use this space to take notes.

Resource	Notes
Module Resources	
Appendix A	
Appendix B	
Appendix C	
Materials Kits	
Digital Platform	
Art	
Core Texts	

Resource	Notes
Knowledge Deck™ Posters and Cards	
Digital Platform	
Implementation Guide	
Materials Lists	
Pacing Guide	
Preparation Guide	
Preparation Video	
Family Tip Sheet	
Spanish Resources	

## Module Resources Exploration

Use this space to record notes on any resources you might need to print or prepare.

## Appendix A: Module Storyline Exploration

Use this space to record notes on what you notice about the development of anchor visuals throughout the module or how students engage with the content learning cycle throughout a concept.

## **Classroom Footage: Level 3 Module 2 Survival and Change**

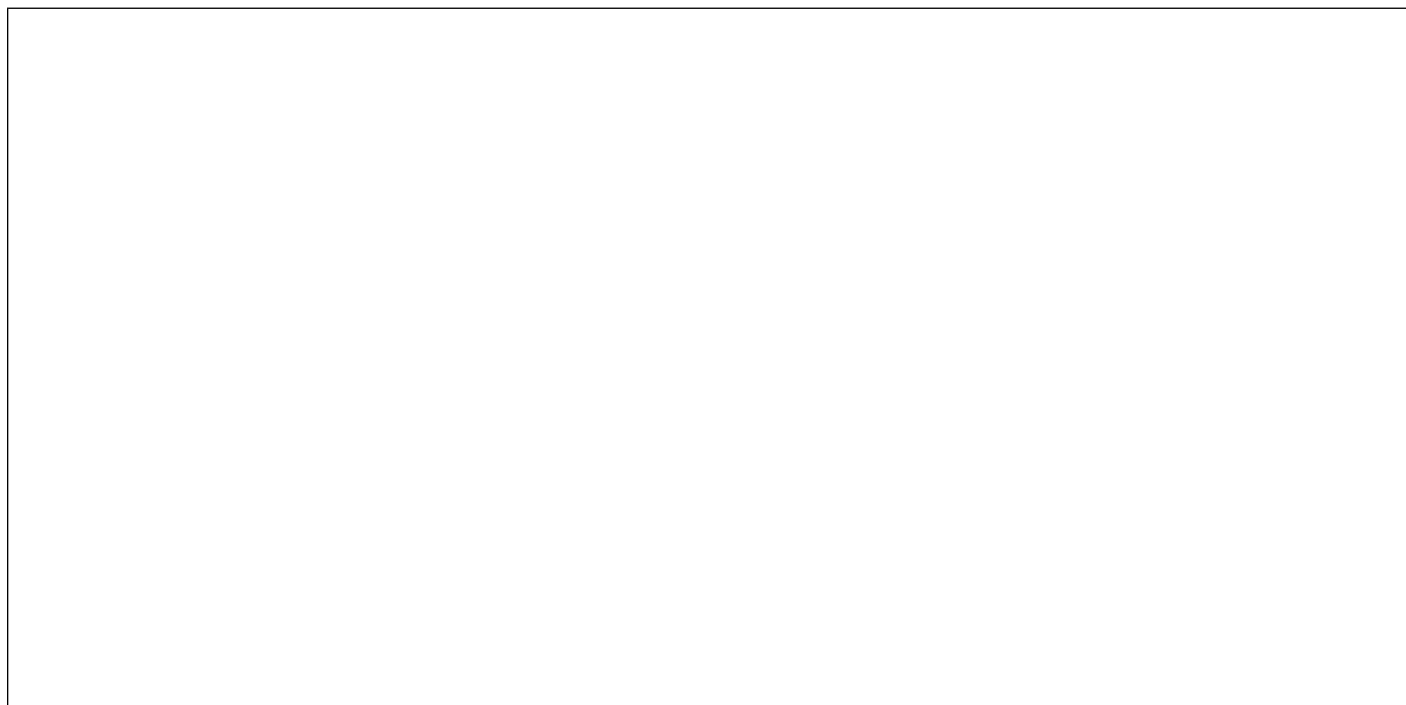
**Use this space to take notes on what you notice about the approach *PhD Science Texas* uses to introduce key terms.**

## **Activity Before Concept (ABC) → Concept Before Terminology (CBT)**

**Use this space to take notes on the approach *PhD Science Texas* uses to introduce key terms.**


## Appendix B: Module Glossary Exploration

Use this space to take notes on how a term in your module is introduced.

A large, empty rectangular box with a thin black border, intended for students to take notes on how a term in their module is introduced.

## Planning Time

Use this space to record notes as you explore *PhD Science Texas* resources.

A large, empty rectangular box with a thin black border, intended for students to take notes during their planning time.

## Reflection

**Identify two actionable next steps.**

1. \_\_\_\_\_  
\_\_\_\_\_

2. \_\_\_\_\_  
\_\_\_\_\_

**Identify your biggest takeaway.**

1. \_\_\_\_\_  
\_\_\_\_\_



## Works Cited

English Language Proficiency Standards, 19 Tex. Admin. Code § 74.4 (2007).

Kamkwamba, William, and Bryan Mealer. 2012. *The Boy Who Harnessed the Wind*. New York: Penguin Random House.

Messner, Kate, and Christopher Silas Neal. 2015. *Over and Under the Pond*. San Francisco: Chronicle Books.

Reiser, Brian J., Michael Novak, Tara A. W. McGill, and William R. Penuel. 2021. “Storyline Units: An Instructional Model to Support Coherence from the Students’ Perspective.” *Journal of Science Teacher Education* 32, no. 7: 805–829. <https://doi.org/10.1080/1046560X.2021.1884784>.

Texas Essential Knowledge and Skills for Science, 19 Tex. Admin. Code § 112 (2021).

## Credits

Great Minds® has made every effort to obtain permission for the reprinting of all copyrighted material. If any owner of copyrighted material is not acknowledged herein, please contact Great Minds for proper acknowledgment in all future editions and reprints of this document.